

REMARKS

Claims 1-4, 6-14 and 16-20 are pending in this application. Claims 1-3, 6-8 and 16 have been amended by the present Amendment. Amended claims 1-3, 6-8 and 16 do not introduce any new subject matter.

REJECTION UNDER 35 U.S.C. § 112

Reconsideration is respectfully requested of the rejection of claims 1-4, 6-14 and 16-20 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have amended claims 1, 6 and 16 to address the issues pointed out by the Examiner on page 2 of the January 5, 2009 Office Action.

Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 1-4, 6-14 and 16-20 under 35 U.S.C. § 112.

REJECTION UNDER 35 U.S.C. § 103

Reconsideration is respectfully requested of the rejection of claims 1-4, 6-14 and 16-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Pub. No. 20020080497 ("Tanaka") in view of U.S. Patent No. 4,701,591 ("Masaki").

Claims 1, 6 and 16 have been amended to essentially recite that the beam has substantially the same intensity as the intensity of each of the laser beams from the laser beams generated by the beam generators, and has substantially the same duration time as the sum of each duration time of the laser beams.

In contrast to the claimed embodiments, none of the cited references disclose these features as claimed.

For example, Tanaka fails to disclose that the beam controlled or synthesized has the same intensity as the source laser beams. Tanaka merely discloses that the source lasers may have the same intensity as each other as described in ¶ [0067].

[0067] Note that although two laser oscillators are used in embodiment mode 2, the number of laser oscillators is not limited to two, provided that a plurality of laser oscillators are used. The energy densities of the plurality of pulses need not be the same. Further, optimal values for the additional light path length and the number of laser oscillators will differ depending upon factors such as the state of the semiconductor film and the type of laser oscillator.

Further, unlike the claimed embodiments, Tanaka discloses increasing the duration time of the laser, as described in ¶ [0064].

[0064] Laser light is emitted at the same time from the laser oscillators 121a and 121b. Although not shown in the figure, by using a TFP, a first laser light 1 emitted from the laser oscillator 121a is made to have only s components, and a second laser light 2 emitted from the laser oscillator 121b is made to have only p components. The laser light 1 is reflected by the reflective mirror 122, after which it arrives at the TFP 123. The laser light 2, on the other hand, arrives at the TFP 123 without going by way of reflective mirrors and the like. A light path difference is thus formed between the laser light 1 and the laser light 2 in accordance with the distance between the reflective mirror 122 and the TFP 123. A difference in time required to reach a substrate develops, and the cooling speed of a semiconductor film becomes slower. The density of crystal nuclei that develop therefore becomes lower, the crystallization time becomes longer, and large size crystal grains can be formed. Furthermore, the light path difference between the laser lights emitted from the laser oscillators 121a and 121b can be arbitrarily changed by changing the distance between the reflective mirror 122 and the TFP 123.

Therefore, for at least the above reasons, Applicants respectfully submit that claims 1, 6 and 16 are patentable over the cited references.

For at least the reason that claims 2-4 depend from claim 1, claims 7-14 depend from claim 6 and claims 17-20 depend from claim 16, claims 2-4, 7-14 and 17-20 are also submitted to be patentable over the cited references.

Therefore, Applicants respectfully request that the Examiner withdraw the rejection of claims 1-4, 6-14 and 16-20 under 35 U.S.C. § 103(a).

DEPENDENT CLAIMS

Applicants have not independently addressed the rejections of all the dependent claims because Applicants submit that, in view of the amendments to the claims presented herein and, for at least similar reasons as why the independent claims from which the dependent claims depend are believed allowable as discussed, supra, the dependent claims are also allowable. Applicants however, reserve the right to address any individual rejections of the dependent claims should such be necessary or appropriate.

An early and favorable reconsideration is earnestly solicited. If the Examiner has any further questions or comments, the Examiner may telephone Applicants' Attorney to reach a prompt disposition of this application.

Respectfully submitted,



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